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ABSTRACT

A model of caregiver-child interaction processes is proposed in which adult attributions are conceptualized as moderator variables. Adult attributions are seen as acting in either a sensitizing or a buffering role in determining the extent to which child behavior or characteristics influence adult affect and behavior. In earlier research (Bugental and Shennum, 1984), this model was tested in a laboratory analog of family interaction. Support was found for the model in terms of nonverbal manifestations of affect. Research reported here extends those findings by exploring the physiological function of child characteristics and caregiver attributions. Eighty undergraduate women viewed videotapes of responsive and unresponsive children in anticipation of interacting with them later. All subjects were premeasured on the Parent Attribution Test (PAT). During viewing and post-questioning, continuous readings were made of their heart rate, skin temperature, and skin conductance. Subjects with low perceived control (PC) over caregiving outcomes, as assessed by the PAT, were found to be more reactive to child responsiveness or unresponsiveness than subjects with high PC. Low PC subjects reacted to unresponsive children with decreased levels of skin temperature and increased heart rate and skin conductance, suggesting anxious arousal. The model is also applied to ongoing research on families at risk for child abuse. (RH)

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Caregiver Attributions as Moderators of Child Effects

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Caregiver Attributions as Moderators of Child Effects

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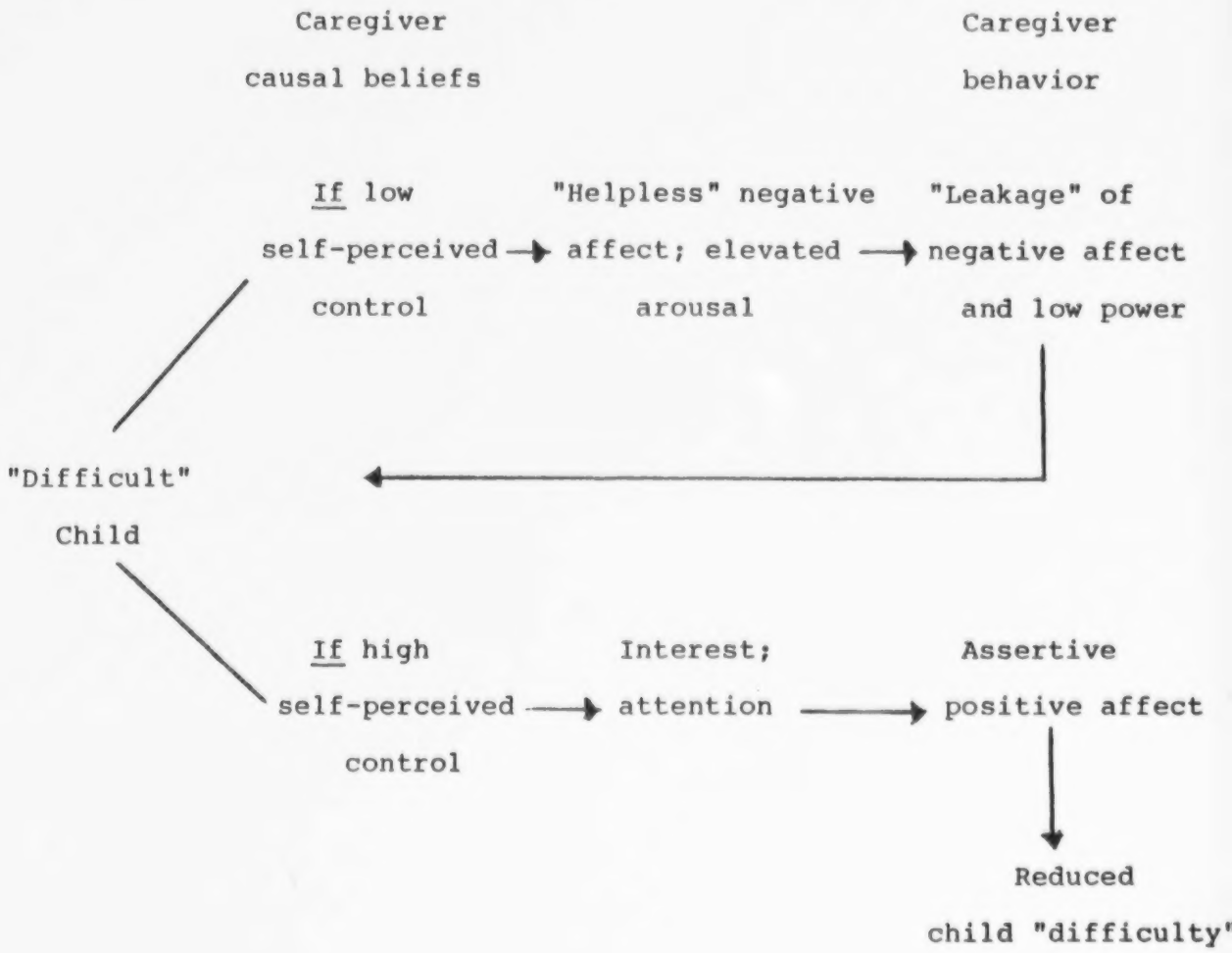
In the research I want to present to you today, I will be concerned with the role of child behavior and adult cognitions in the development and maintenance of stressful family systems. Just as illness, job problems, marital conflict, and daily hassles can act to induce feelings of stress, child behaviors and the demands of caregiving can be seen as potentially stress-inducing. And just as there are individual differences in vulnerability to life stresses, there are individual differences between parents in their reactions to caregiving demands. I will describe one study in which we have assessed individual differences in physiological indications of stress in response to difficult children. And I will briefly mention ongoing research in which we have measured individual differences in expressed affect in response to children at risk for abuse. In both studies, we hope to show that adults' beliefs about caregiving influence the extent and nature of their emotional reactivity to child behavior.

Within the adult literature on stress and coping, causal beliefs have proven themselves to be important moderators of response to negative life events (e.g., Anderson, 1977, Kobasa, 1979; Lefcourt, Miller, Ware, & Sherk, 1981). Those individuals who believe that aversive events are outside their control are particularly sensitive to the adverse consequences of those

events. In the same fashion, we may anticipate that adults who believe they have little capability to influence caregiving outcomes may be particularly devastated by the characteristics of "difficult" children. Although concerns with the reciprocal influences of caregivers and children have historically focused on behavior, increasing interest has emerged in the role of cognitive moderators within such systems (e.g., Siegel, 1985). Questions are now being asked about the differential impact of child behavior as a function of the way the caregiver construes or interprets the child's actions.

In our research (Bugental, 1987; Bugental, Mantyla & Lewis, 1987; Bugental and Shennum, 1984), we have proposed an interactional model which introduces parental attributions (causal beliefs) as moderators within caregiving systems. Adult attributions are seen as acting either in a sensitizing or buffering role in the extent to which child behavior or characteristics influence adult affect and behavior. As can be seen in Figure 1, we predict that children who manifest behaviors



that may pose a potential threat to the caregiver's control are more likely to have an adverse impact on caregivers who have low perceived control over caregiving outcomes. When confronted with a child who threatens their tenuous caregiving abilities, they are likely to respond with experienced stress -- as reflected in elevated arousal, negative affect, and reduced self-perceived power. To the extent the adult reveals these inner feelings through unaware behavior -- in particular in combination with outward

efforts to control the child -- a self-maintaining system may ensue. That is, the caregiver's response pattern is likely to maintain or exacerbate the stress-inducing nature of the child's behavior.

In earlier research (Bugental & Shennum, 1984), this model was tested in a laboratory analog of family interaction. Children trained or selected to behave in a responsive or unresponsive fashion interacted with unrelated mothers. We found that those adults who had low perceived control over caregiving outcomes were more reactive to child behavior, and were more likely to respond maladaptively to unresponsive child behavior. When confronted with an unresponsive child (e.g., a child who was slow to comply or non-compliant to conversational leads or requests), they revealed their negative affect and perceived powerlessness through their tone of voice (as judged in content-filtered speech); additionally, they employed a control stategy which could be viewed as ingratiating. These tactics, in turn, acted to maintain the child's aversive behavior.

Although this line of research was informative with regard to attributional moderators and affective mediators within adult-child interaction systems, it did not provide direct information concerning the arousal levels induced as a function of the child's behavior. Research on child effects has increasingly shown the extent to which aversive child behavior can act to increase caregiver arousal level -- along with altered affect and behavior (Frodi, Lamb, Donovan, Neff, & Sherry, 1978). In order to explore the extent to which our measures of caregiver

affect and behavior were paralleled by congruent changes in arousal level, we embarked on a second line of research. We went on to assess physiological changes that occurred as a function of anticipated interaction with children (Bugental & Cortez, 1987). Undergraduate women viewed videotapes of responsive and unresponsive children (tapes obtained in our earlier research) in anticipation of interacting with them. All subjects were pre-measured on the Parent Attribution Test (PAT) -- an instrument we have developed to measure the perceived causes of caregiving success and failure. During a baseline period, viewing and post-questioning, continuous readings were made of their heart rate, skin temperature, and skin conductance. We predicted that the anticipated interaction with an unresponsive child would have a general tendency to induce anxious arousal. This pattern was expected to be greater, however, among adults with low perceived control. That is, the anticipation of a potentially difficult interaction should elicit maximum levels of anxious arousal in individuals who believe that they are ill-equipped to cope with such a situation.

As predicted, physiological reactions to child responsiveness were moderated by the perceived control of the adult. Reactions to anticipated interactions with responsive or unresponsive children depended upon the adult's pre-existing beliefs. If they believed that negative interactions with children were relatively uncontrollable, they reacted with relatively high heart rate (HR), heart rated variability (HRV), and skin conductance, and relatively low skin temperature. During the viewing period, their

HR levels increased over those present during baseline readings - - suggesting defensive arousal. In all other experimental groupings, subjects showed reduced heart rate levels (relative to their own baselines) while viewing the child on the videotape. This pattern can be thought of as reflecting an attentional or "information intake" process (Lacey, Kagan, Lacey & Moss, 1963). As can be seen in Table 1, there is a consistent interaction between perceived

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Insert Table 1 about here

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control of the caregiver and responsiveness of the child. The interaction patterns shown for heart rate, heart rate variability, and skin conductance reached statistical significance; the interaction obtained for skin temperature showed the same pattern but it did not reach statistical significance.

These findings support our overall contention that caregiver beliefs influence their reactions to differences in child behavior. Adults with low perceived control not only show a helpless affective response style during interactions with unresponsive children, they also show what may be thought of as anxious arousal in anticipation of interaction with such children. The adult's construal of the unresponsive child's behavior as uncontrollable leads to an arousal pattern suggesting mobilization for defensive action (Obrist, 1981) rather than positive interest or attention.

In ongoing research, we are now testing the application of

these findings to malfunctioning family systems. Specifically, we are testing the application of our model to physically abusive families. Vasta (1982) has proposed that individual differences in levels of physiological reactivity may pose an important individual difference variable that increases risk for abuse. Individuals who characteristically experience higher levels of arousal may be more reactive to potential stressors within the caregiving setting. And indeed, Frodi and Lamb (1978) have demonstrated that abusive parents are more likely to respond with elevated arousal to crying infants. Extrapolating from Zillman's findings on transfer of excitation (e.g., Zillman, Bryant, Cantor, & Day, 1975), Vasta predicted that physiologically reactive individuals would respond more readily with aggression when provoked. In our research, we hope to show that low perceived control may represent a cognitive antecedent of physiological reactivity. That is, if caregivers appraise the child's behavior as a threat, they are more likely to experience feelings of initial powerlessness; if they also interpret the child's negative behavior as intentional and deliberate, their helplessness may turn to contempt or anger. These affective responses will in turn be reflected in physiological responses.

In our ongoing research (Bugental, Mantyla, & Lewis, 1987), we are testing the extent to which abused children can be conceptualized as stress-inducing, and the extent to which abusive parents have belief systems that make them more vulnerable to this potential source of stress. We have videotaped interactions within families who are at risk for

abuse. Mothers receiving counseling at a child abuse agency were videotaped interacting with two of their children - - one of whom was at greater risk for abuse than the other. In a companion study, unrelated mothers (not in counseling) were videotaped interacting with sibling pairs from the abusive families. Again, it was predicted that causal beliefs would act to moderate the effects of child behavior. In other words, we assessed differential reactions to target versus non-target children as function of the belief systems of their own or unrelated mothers.

At this point, we only have preliminary findings - - but the evidence we have is supportive of our overall model. First of all, children who are targeted for abuse were found to behave in a way that was judged by unrelated mothers to be more "unexpected, unusual, or inappropriate for age" than the behavior shown by their less targeted siblings. This finding is in itself not surprising. Past research has documented the fact that abused children are more likely to be seen as "atypical" (Gil, 1970), and to show behavior patterns and characteristics that caregivers find difficult, e.g., communication problems, hyperactive behavior style, learning disabilities, chronic illness (de Lissovoy, 1979). What is new in the present research is the documentation of this difference within sibling pairs -- thus providing evidence for differences in characteristics of children within the same family rather than differences between abusive and non-abusive families.(As there is emerging evidence that some of the distinguishing characteristics of abused children precede abuse, it may be assumed that some of these behaviors may be understood to have stress-eliciting

qualities as well as being potential consequences of abuse) The significance of this quality of abused children rests in its implications for adult cognitions. As Wong and Weiner have demonstrated (1981), people are more likely to seek explanations for events if those events are aversive and unexpected. Thus it appears that caregivers are more likely to access their causal beliefs in attempting to explain the behavior of "difficult" children.

We also anticipated that mothers who were at high risk for abuse would have different beliefs about the causes of caregiving outcomes than would mothers who were at relatively lower risk. Although all mothers within the risk group had sought help at a child abuse agency, they differed markedly in terms of their actual abuse history. One-third had abused two or more of their children; one-third had abused one but not the other children; and one-third had not abused any of their children (although overdiscipline was common in this group). We predicted that highly abusive parents would have low self-perceived control over caregiving outcomes but would attribute high control over caregiving outcomes (in particular, negative outcomes) to children. As expected, we found that level of abuse was predicted both by (a) the belief that the caregiver had little ability to prevent bad caregiving outcomes, and (b) the belief that the child had <u>high</u> control over bad caregiving outcomes (Bugental, Blue & Cruzcosa, 1987). (Attributions for caregiving success, however, did not predict abuse level). Thus, those parents who were at particularly high risk for abuse were likely to believe

that they themselves could do little to prevent undesired careigiving outcomes but conversely the child could prevent such outcomes. These findings are consistent with the observations of Affleck, Allen, McGrade and McQueeney (1982), who found that parents who coped poorly with newborn infants with serious medical problems were more likely to blame others and less likely to believe that they could have done anything to prevent the child's medical condition. So there is converging evidence for the role of "low power" causal beliefs as moderators of ineffective coping with difficult children and difficult caregiving settings.

The ultimate test of our model, however, involves an assessment of the interactive effects of caregiver attributions and child behavior on the response patterns shown. We have obtained ratings on the vocal affect included in essentially all codable messages from caregivers to children (over 12,000 messages). Messages, routed through a band-pass filter to eliminate intelligibility, have been rated by trained judges who are themselves mothers. Our preliminary findings have revealed that both related and unrelated mothers show differential expressive reactions to target versus non-target children. Children who are more likely to be targeted for abuse elicit vocal properties that reflect negative affect and/or stress; adults engaged in conversation with them are likely to sound more unpleasant, less animated, less happy, less assertive, etc. Additionally, we obtained the predicted interaction between child target status and perceived control of the adult. Among related

mothers, for example, those adults with low perceived control showed high levels of disgust or contempt with the target child than were adults with high perceived control. Their level of contempt was about twice as high as that shown by other mothers. Among unrelated mothers, the same pattern emerged but for a different negative affect. Adults with low perceived control, when paired with target children, were the only group to sound increasingly sad or depressed and less happy the longer they interacted with the child. These preliminary findings support our conceptualization of "high risk" children as threatening the control capability of the caregiver, and the causal beliefs of caregivers as influencing vulnerability to this threat or stress.

As a next step, we are assessing facial indications of affect using Ekman and Friesen's' Facial Action Coding system (1978). And ultimately, we will track the sequential pattern across the course of interactions between caregivers and children. That is, we need to know the extent to which child behaviors precede adult affective responses, and the extent to which adult affective responses act to maintain child behaviors. We know from the findings of others that abusive parents are likely to use directive and affectively negative caregiving strategies (Burgess & Conger, 1978; Reid, Patterson, & Loeber, 1982; Trickett & Kuczynski, 1986) that are likely to maintain the malfunctioning family system. Our results would suggest that such systems are more likely to evolve among caregivers whose belief system includes low perceived control.

In summary, we have found support both in controlled

laboratory research and in field settings for our general model. Adults who believe they have little power to prevent negative caregiving outcomes are adversely reactive to the stress-inducing nature of "difficult" child behavior. Their pattern of interpreting the child's behavior and the caregiving setting sets them at particular risk for maladaptive response patterns. They show an elevated level of arousal, and they reveal their experienced affect and powerlessness through subtle nonverbal expressive patterns. This response pattern potentially acts to maintain the stressful transactional system. In considering the role of child effects on adult response patterns, it is thus important to keep in mind the presence of individual differences between caregivers in their cognitive appraisal of the child and the caregiving setting. As Bell has noted (1979), the child is after all interacting with a "thinking adult." Just as individuals who have maladaptive belief systems cope less successfully with illness, natural catastrophes and daily stresses, they also appear to be more sensitive to and cope less successfully with children who exceed their perceived caregiving capabilities.

References

Affleck, G., Allen, D., McGrade, B.J., & McQueeney, M. (1982) Maternal causal attributions at hospital discharge of high-risk infants. American Journal of Mental Deficiency, 86, 575-580.

Anderson, C.R. (1977) Locus of control, coping behavior, and performance in a stress setting: A longitudinal study. Journal of Applied Psychology, 62, 446-451.

Bell, R.Q. (1979) Parent, child, and reciprocal influences. American Psychologist, 34, 821-826.

Bugental, D.B., & Cortez, V. (1986) Affective and physiological reactivity to unreponsive child behavior. Paper presented at the Nags Head Conference on Affect and Health.

Bugental, D.B., Blue, J., & Cruzcosa, M. (1987) Causal attributions for caregiving success and failure: A theoretical and methodological analysis. Unpublished paper.

Bugental, D.B., Mantyla, S.M., & Lewis, J. (In press) Parental attributions as moderators of affective communication to "abuse-eliciting" children. In D. Cicchetti & V. Carlson (Eds.) Current research and theoretical advances in child maltreatment. Cambridge University Press.

Bugental, D.B., & Shennum, W.A., (1984) "Difficult" children as elicitors and targets of adult communication patterns: An attributional-behavioral transactional analysis. Monographs of the Society for Research in Child Development, 49, (Serial No. 205, 1).

Burgess, R.L., & Conger, R. (1978) Family interaction in abusive, neglectful, and normal families. Child Development, 49, 1163-1173.

de Lissovoy, V. (1979) Toward the definition of "abuse provoking child". Child Abuse and Neglect, 3, 341-350.

Ekman, P., Levenson, A.W., & Friesen, W.V. (1983) Autonomic nervous system activity distinguishes among emotions. Science, 221, 1208-1210.

Frodi, A.M., & Lamb, M.E. (1978) Child abusers' responses to infants'smiles and cries. Infant Behavior and Development, 1, 187-198.

Frodi, A.M., Lamb, M.E., Leavitt, L.A., Donovan, W.L., Neff, D., & Sherry, D. (1978) Fathers' and mothers' responses to the faces andcries of normal and premature infants. Developmental Psychology, 14, 490-498.

Kobasa, S. C. (1979). Stressful life events, personality, and

health: an inquiry into hardiness. Journal of Personality and Social Psychology, 37-1-11.

Lacey, J.I., Kagan, J., Lacey, B.C., & Moss, H.A. (1963) The visceral level: Situational determinants and behavioral correlates of autonomic response patterns. In P.H. Knapp (Ed.), Expression of emotions in man. N.Y.: International Universities Press.

Lefcourt, H.M., Miller, R.S., Ware, E.E., & Sherk, D. (1981) Locus of control as a modifier of the relationship between stressors and moods. Journal of Personality and Social Psychology, 41, 357-369.

Obrist, P.A. (1981) Cardiovascular psychophysiology - A perspective. N.Y.: Plenum.

Reid, J.B., Patterson, G.R., & Loeber, R. (1982) The abused child: Victim, instigator, or innocent bystander? In J. Bernstein (Ed.) Response structure and organization. Lincoln: University of Nebraska Press.

Sigel, I.E. (1985) (Ed.) Parental belief systems in the psychological consequences for children. Hillsdale, N.J.: Erlbaum.

Trickett,D.K., Kucyznski, L. (1986) Children´s misbehaviors and paental discipline strategies in abusive and nonabusive families. Developmental Psychology, 22, 115-123.

Vasta, R. (1982) Physical child abuse: a dual-component analysis. Developmental Review, 2, 125-149.

Wong, P.T.P., & Weiner, B. (1981) When people ask why questions and the heuristics of attributional search. Journal of Personality and Social Psychology, 40, 65--663.

Zillman, D., Bryant, J., Cantor, J.R., & Day, K.D. (1975) Irrelevance of mitigating circumstances in retaliatory behavior at high levels of excitation. Journal of Research in Personality, 9, 282-228.

Table 1

Physiological Changes Preceding Anticipated Interaction with Responsive and Unresponsive Children

	Unresponsive Children		Responsive Children	
	Low PC[a]	High PC	Low PC	High PC
HR (BPM)	87[b]	82	81	84
HRV	6.5[b]	4.4	4.8	5.5
SC (micro-mhos)	20.5[b]	17.8	17.0	17.7
Temperature (F)	89.9[b]	90.7	90.5	90.4

[a] Low perceived control by adult over caregiving failure.

[b] Corrected for baseline.